

Before and After: Planning and Assessment of New Library Spaces and Services

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Introduction and Context



James B. Hunt Jr. Library
Open for business: January 2, 2013

Introduction and Context

- Construction of new library facility on developing campus
- Main constituents –
 - Textiles: branch library, 1100 users
 - Engineering: no dedicated branch library, 8000 non-traditional users
- Before: one main library (D. H. Hill) on historic campus, 4 small branches
- After: two main libraries (D. H. Hill & Hunt), 3 small branches
- Providing spaces we have never supported before (in terms of technology and quantity)
- No appreciable growth in staff

Our History With User Research

- No assessment librarian, no systematic approach to research.
- Usability studies (approx. 10 years)
- Web redesign in 2010, heavy user-research component.
- Beginning with Hunt Library design and planning, more research focused on spaces and services. Still very ad hoc/reactive, led by subject librarians.

User Research 2011-2013

- “Before” studies:
 - Observational
 - Interviews
 - Short, in person survey
 - Long, online survey
- “After” studies:
 - Observational
 - Interviews
 - Long, online survey

Interviews

- For faculty and grad students
- To inform design of the faculty commons and grad commons spaces
- February 2011: 71 interviews (40 fac/31 grad)
- March 2012: 8 interviews (all grad)
- May 2013: 11 interviews (all fac)

Interview Research Questions

- About their research
- About their work lives
- About their work spaces
- About their technology needs
- About their furniture needs
- How they anticipate using Hunt and what would entice them

Interview Methodology

- Script of 22 questions, some additions mid-way
- Approximately 1 hour in length
- Conducted in person (their office or work space)
- Faculty: 1 at a time, Grad: sometimes in groups
- 1 interviewer, 1 note-taker, digital recorder
- Trained subject librarians
- Transcribed recordings

Lessons Learned from the Methodology

- Professional transcription is worthwhile.
- Easing people into the process may be necessary.
- Insist that interviewers read every question.
- Pairing up is a good thing.

Interview Analysis

- Carried out by one librarian
- Transcripts examined for data related to the research questions
- Data grouped by category, quantified, and examined for trends

Interview Results

- Graduate Students
 - Need for varying types of spaces
 - Need to support varying technologies
 - Different needs of different user groups
 - Non-thesis master's students
 - TAs
 - PhD students
 - Learned about the types of spaces departments provide for grad students

Interview Results

- Faculty
 - Needs not as explicit as with grad students, broke out into:
 - Traditional (teaching support, and collections needs)
 - “A place to impress someone” – strategic partnerships
 - Hidden population – busy younger engineering faculty working towards tenure

Observational

- Students observed:
 - Undergraduate, graduate students
- Before
 - May 2011
 - To inform design of study spaces in Hunt
 - Engineering Buildings public spaces, Textiles Library (1 study)
- After
 - Spring 2013, Fall 2013
 - To assess students' actual use of spaces
 - Hunt Library Graduate Student Commons (2 studies)

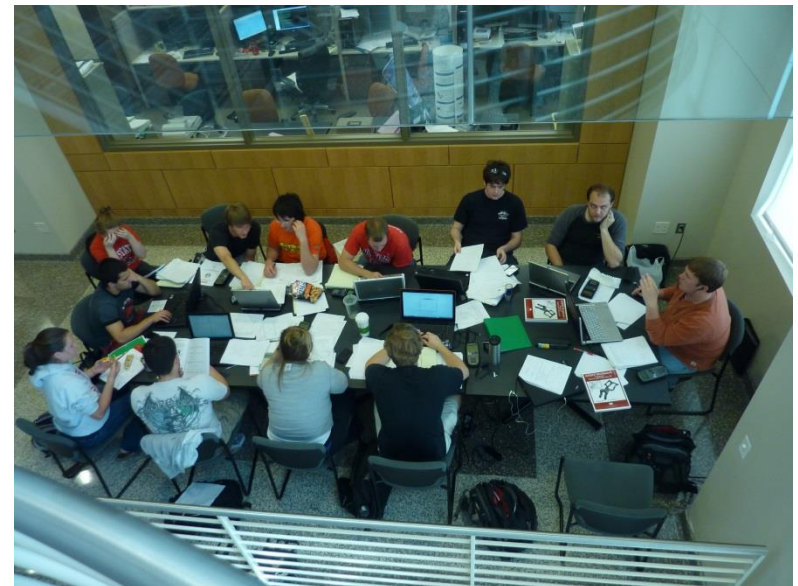
Observational Research Questions

- When are students using the space?
- How are students using the space?
- What types of furniture are students using?
- What types of technology are students using?
- Are the students working alone or with others?
- What size groups?
- Are there any unmet needs?

Observational: May 2011

Finals week

- Photo/observation + brief interviews (8 days)
- Public spaces within Engineering Buildings I, II, and III
- Textiles Library



- **April 2013**

- **Fall 2013 (on-going)**

- [illegible]



Observational Methodology

- Design process:
 - Learned from others (e.g., colleagues, literature search)
 - Pre-tested if possible
 - Otherwise: “Just do it!”
- Implementation:
 - Schedule dictated by academic calendar, library events and activities, staff availability
 - Data recorded on paper/printed templates
 - Pre-observation team meeting to review protocols
 - Paired up team members on first observation to establish baseline and ensure consistency

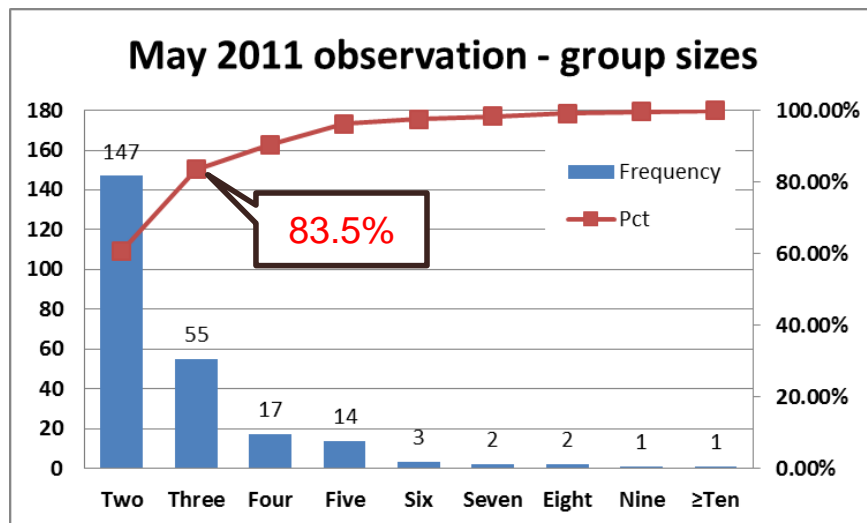
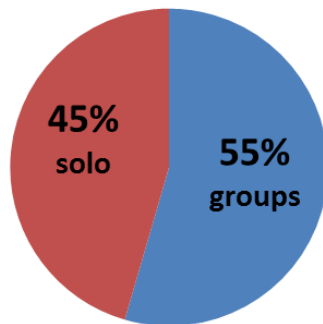
Observational: Analysis

- Microsoft Excel
- Data analyzed for trends related to research questions

Observational Results: Groups

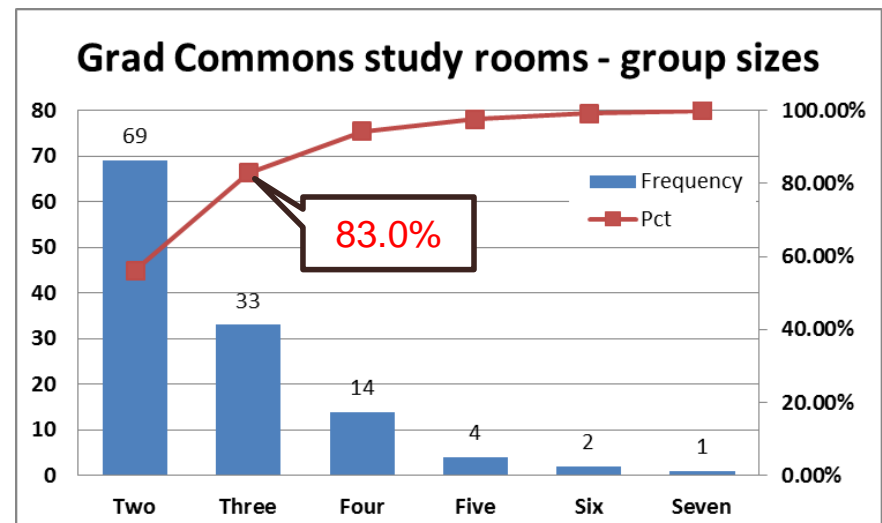
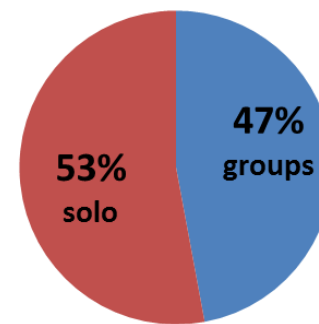
May 2011 (EBs & Textiles Library)

(n=1,222)

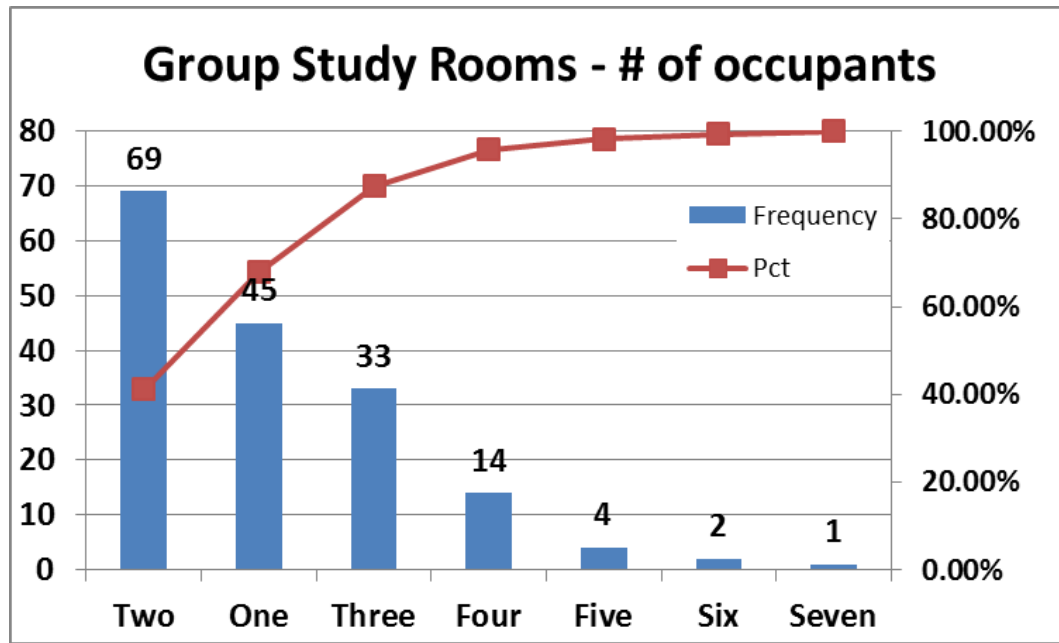


April 2013 Hunt Grad Commons

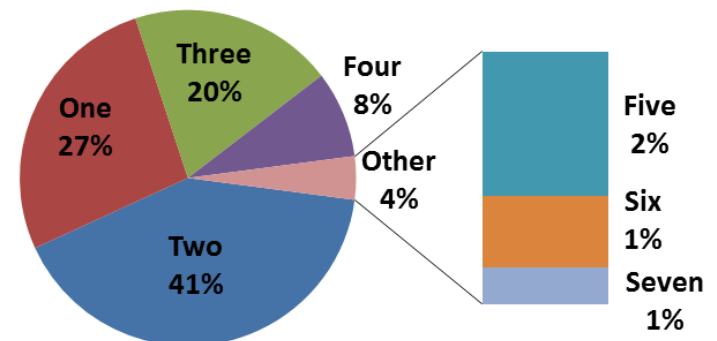
(n=890)



Observational Results: Group Rooms



Frequency (including n=1)



Observational Results

- Need for quiet, individual study space
 - 26.8% of group study room uses were by individuals
 - 25.5% of workstation occupants were not using workstations



Observational: Lessons Learned

- Ideal case: plan, pretest, refine, repeat as needed
- If quick turn-around required: just do it
- Seek feedback from interested parties to ensure important data is being captured
- Recognize the limitations of observation
 - Can only infer so much from the data
- Follow-up interviews can help clarify observational data
 1. How do you like this space?
 2. Do you have everything you need?
 3. Is there anything else you want?

Surveys

- Students surveyed
 - Engineering students
 - Engineering and Textiles graduate students
- To examine students' group study habits and use of library spaces and technology

Surveys

- Before

- September 2011: short, in-person 1 minute survey,
 - Engineering and Textiles students
 - Follow-up to May 2011 photo observation
- Fall 2012: Extended online survey
 - On-campus graduate students in Colleges of Engineering and Textiles
 - Follow-up to graduate student interviews
 - “Pre-Hunt” snapshot

- After

- Fall 2013: Extended online survey
 - On-campus graduate students in Colleges of Engineering and Textiles
 - “Post-Hunt opening” comparison

Survey Research Questions

- How and to what extent are students using physical spaces in the Libraries?
- Which library services are being used?
- Pre-Hunt: Do they anticipate using Hunt Library?
- Are students using the Libraries for individual or group work?
- What types of technologies are students using?

Survey Methodology (Short Survey)

- Design

- 8 questions drafted in 1 hour by 2 team members
 - Focused on group work and laptop use
- Tested on one student and tweaked

- Implementation

- Launched 2 days later
- Survey available in paper and iPad versions
- 3 days in 3 different engineering buildings,
 - Surveyed 50 students at each location during midday
 - Additional students surveyed at Textiles Library

Survey Methodology (Online Surveys)

- Design

- Questions drafted and reviewed with team members
 - Fall 2012: 96 questions
 - Fall 2013: 78 questions
- Consulted with NCSU University Planning and Analysis (UPA) office
- Pilot-tested with graduate student library workers

- Implementation

- Used Qualtrics (online survey software)
- Survey active for two weeks
- UPA office provided contact information for survey population
- Incentives offered for survey completion (Amazon Kindles)

Survey Analysis

- Microsoft Excel
- Qualtrics analysis tools

Survey Response

September 2011 short in-person

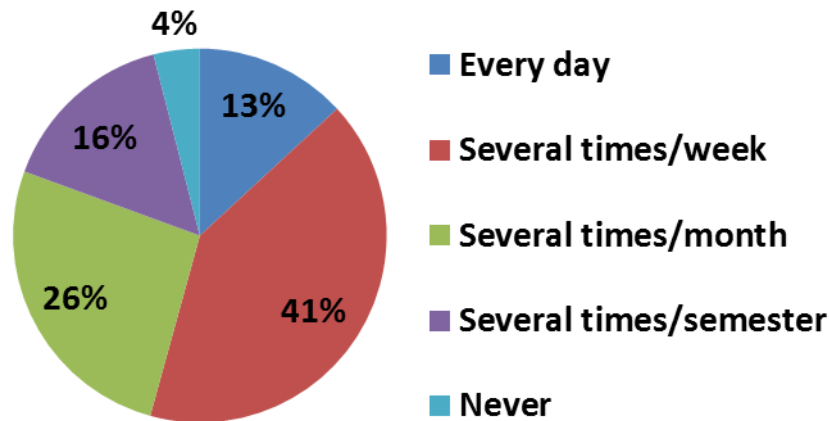
- 177 responses in ~177 minutes
- Demographics of survey respondents similar to survey population
 - Departments
 - Undergraduate/graduate
 - Note: 77% undergraduates

Fall 2012 graduate online survey

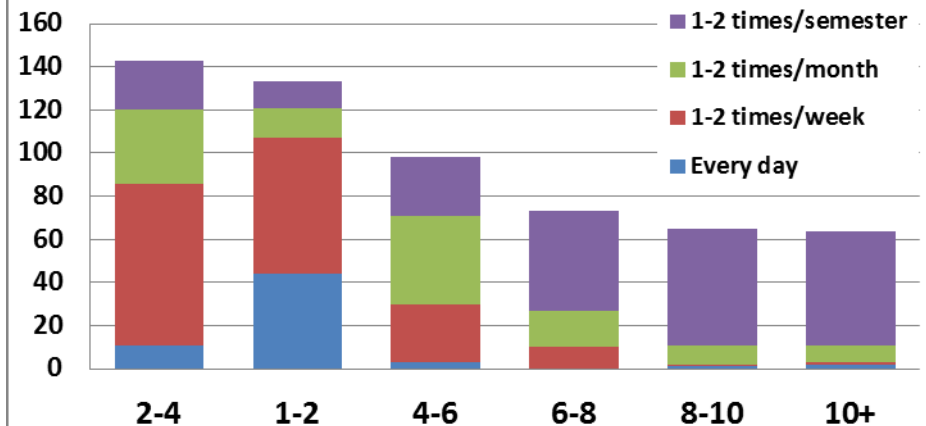
- 781 responses (31% response rate)
- Demographics of survey respondents similar to survey population
 - Degree programs
 - Departments
 - International students

Survey Results: September 2011

Frequency of group study

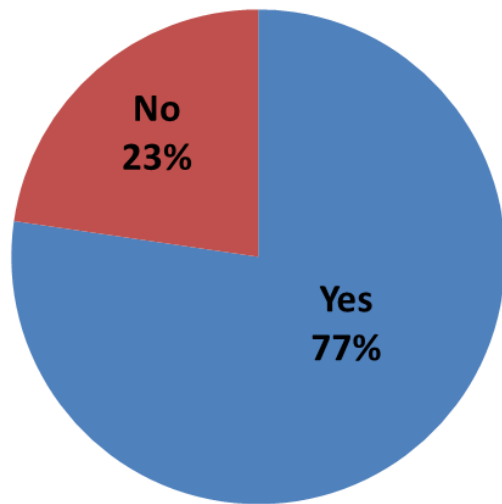


Group study: frequency & group size



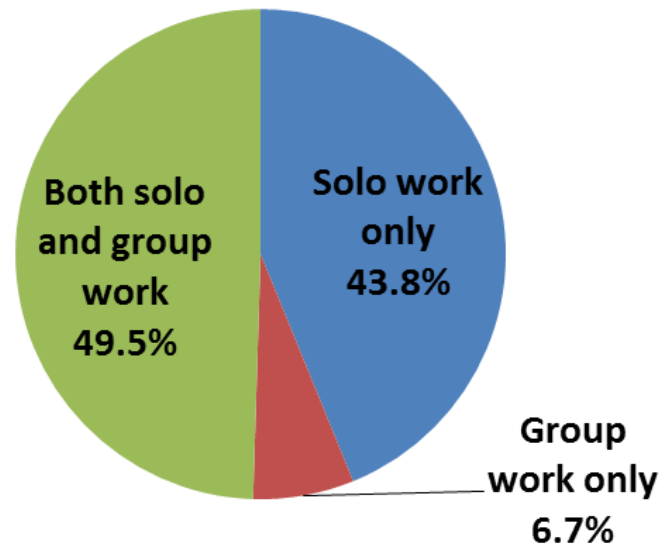
Survey Results: Fall 2012

Q: Have you ever used any physical spaces in the NCSU Libraries this semester?



n=714

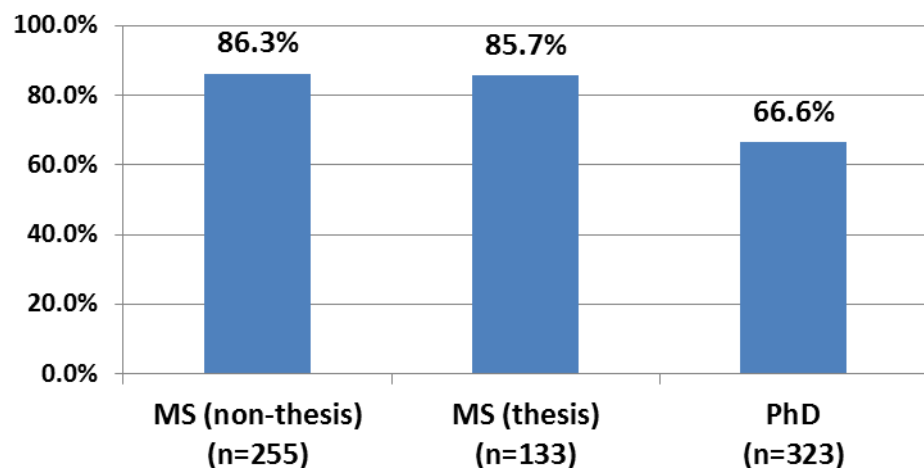
Q: For which activities have you used library spaces?



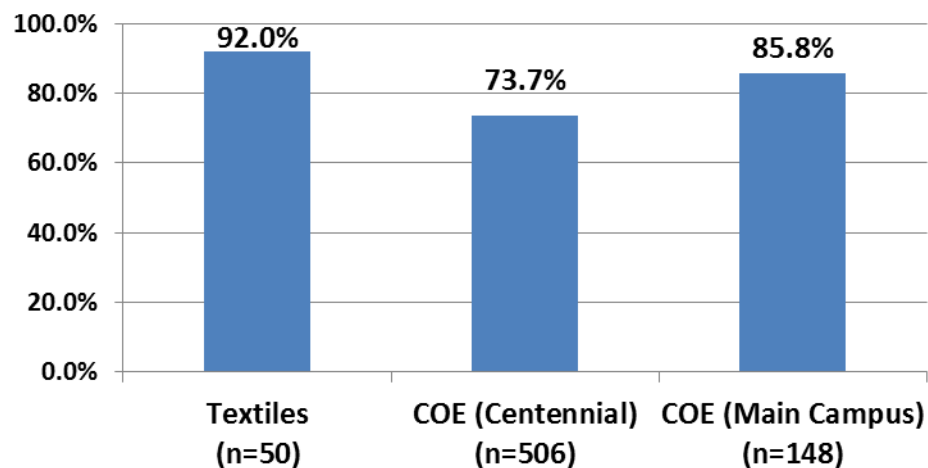
n=511

Survey Results: Library Spaces (Fall 2012)

% use by degree program



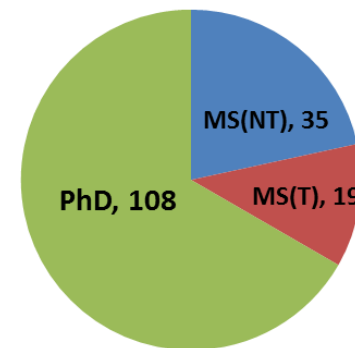
% use by College and campus



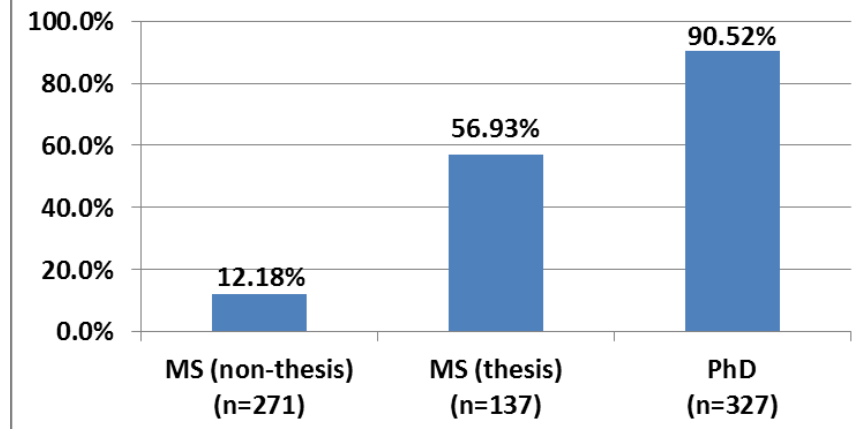
Survey Results: Library Spaces (Fall 2012)

- What keeps them away?
 - Location of libraries
 - Inconvenience due to distance, parking, and/or transportation factors
 - Space
 - Alternative work spaces (e.g., offices)
 - Personal preferences
 - Collections
 - Use of online resources

Non-users by degree program
n=162

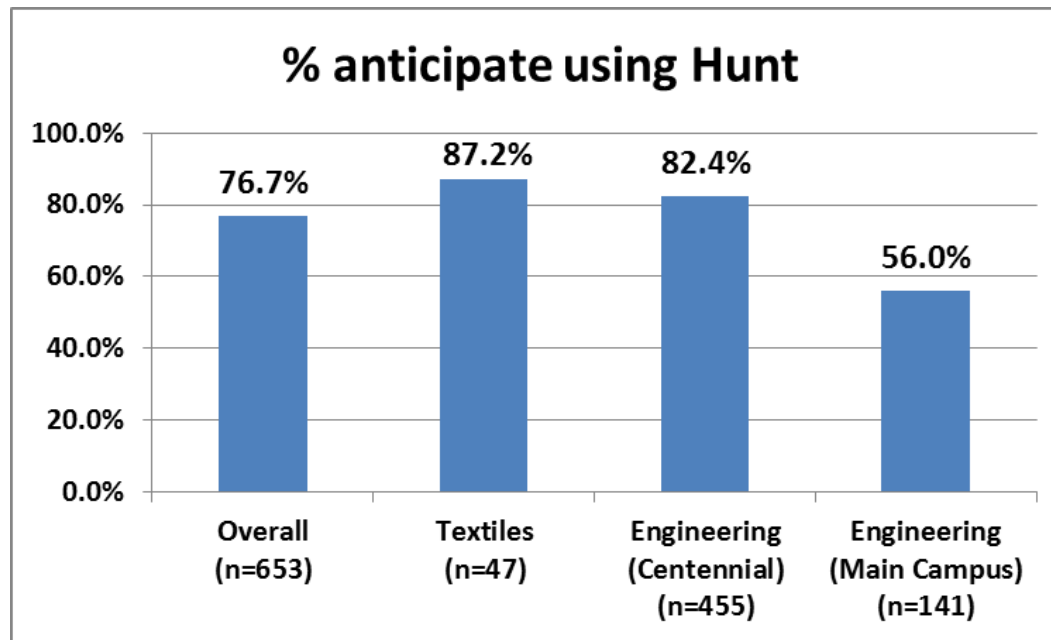


% with offices by degree program



Survey Results: Use of Hunt (Fall 2012)

- 77% of respondents anticipated using Hunt Library
- Includes 59% of Fall 2012 non-library users



Surveys: Lessons Learned

- Paper works better for in-person surveys: can process multiple respondents at the same time
- Take advantage of campus-provided tools and resources, if available (e.g., Qualtrics, survey support)
- Check if clearance is needed from appropriate campus organization(s)
- Resist “mission creep”
- Minimize use of complex questions
- Use text questions/answers to help clarify data

Final Thoughts...

- Design
 - Factor in time for IRB approval
 - IRB application form provides a vehicle for thinking through various steps of study
- Analysis
 - Factor in the time needed for post-study analysis
- Other
 - You get better as you learn
 - Recognize the limits of study types
 - The value of triangulation
 - New role for the subject specialist
 - Just do it!

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